



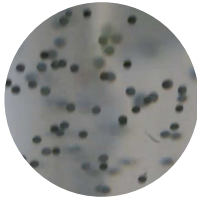
TRISOfuel.

THE FUTURE OF NUCLEAR

BWXT is the only U.S. company to manufacture irradiation-tested uranium oxycarbide TRISO fuel using production-scale equipment. Our Specialty Fuel Facility in Lynchburg, Virginia, perfects fabrication techniques and manufactures the fuel required for the development and production of safe compact nuclear reactors needed to meet growing energy needs.

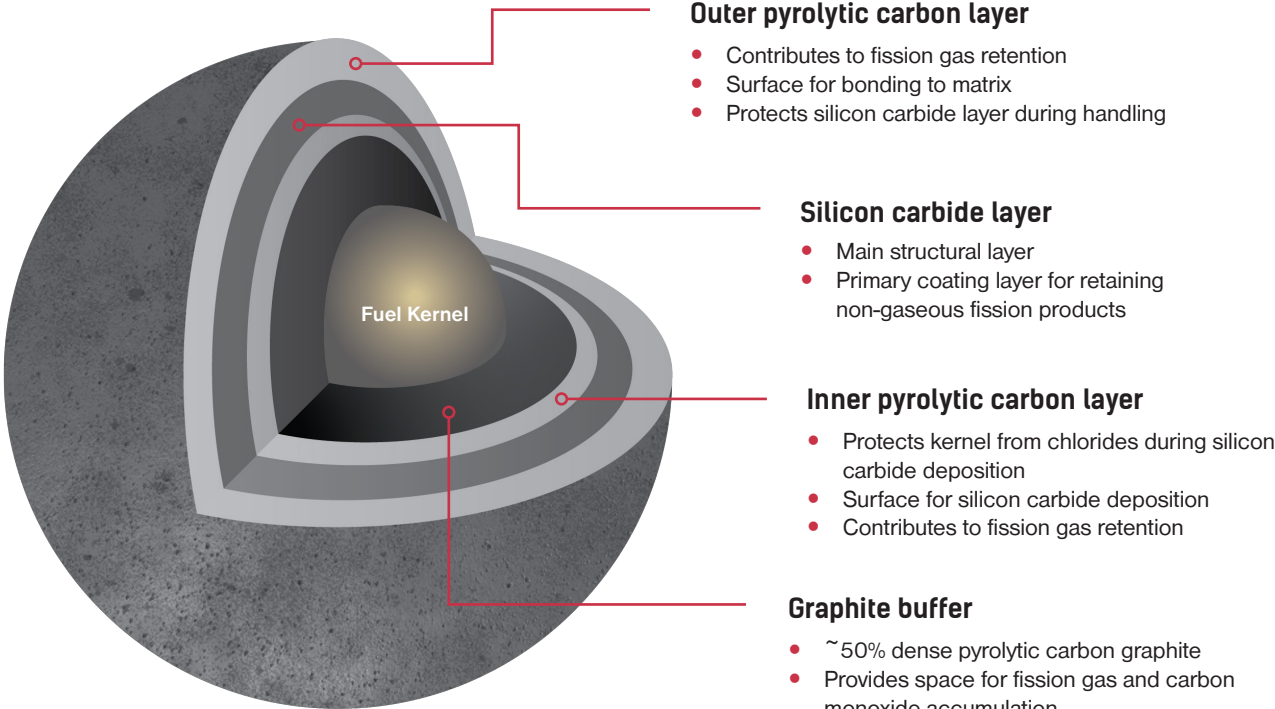
Compared to traditional reactor fuels, TRISO fuels are more resistant to the factors that impact fuel performance the most, including neutron irradiation, corrosion, oxidation and high temperatures.

TRISO particles cannot melt in a reactor when tested at temperatures of up to 1,800° Celsius (>3,000° Fahrenheit), exceeding the predicted worst-case accident conditions for high-temperature gas reactors.

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- **TRISO FUEL IS THE MOST ROBUST NUCLEAR FUEL ON EARTH, CRITICAL IN THE DESIGN OF THE ADVANCED NUCLEAR REACTORS OF TOMORROW.**

BWXT
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TRISO FUEL PARTICLE MODEL



105x the actual size of a TRISO fuel particle

Outer pyrolytic carbon layer

- Contributes to fission gas retention
- Surface for bonding to matrix
- Protects silicon carbide layer during handling

Silicon carbide layer

- Main structural layer
- Primary coating layer for retaining non-gaseous fission products

Inner pyrolytic carbon layer

- Protects kernel from chlorides during silicon carbide deposition
- Surface for silicon carbide deposition
- Contributes to fission gas retention

Graphite buffer

- ~50% dense pyrolytic carbon graphite
- Provides space for fission gas and carbon monoxide accumulation
- Accommodates fission recoils

People Strong
INNOVATION DRIVEN >

At BWX Technologies, Inc. (NYSE: BWXT), we are People Strong, Innovation Driven. Headquartered in Lynchburg, Virginia, BWXT is a Defense News Top 100 manufacturing and engineering innovator that provides safe and effective nuclear solutions for global security, clean energy, environmental restoration, nuclear medicine and space exploration. With approximately 7,000 employees, BWXT has 14 major operating sites in the U.S., Canada and the U.K. In addition, BWXT joint ventures provide management and operations at a dozen U.S. Department of Energy and NASA facilities. Follow us on Twitter at @BWXT and learn more at www.bwxt.com.



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